

Patient Safety Indicator 07 (PSI 07) Central Venous Catheter-Related Blood Stream Infection Rate

July 2021

Hospital-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

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DESCRIPTION

Central venous catheter-related bloodstream infections (secondary diagnosis) per 1,000 medical and surgical discharges for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium). Excludes cases with a principal diagnosis of a central venous catheter-related bloodstream infection, cases with a secondary diagnosis of a central venous catheter-related bloodstream infection present on admission, cases with stays less than 2 days, cases with cancer, and cases with an immunocompromised state.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

NUMERATOR

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-10-CM diagnosis code for central venous catheter-related bloodstream infections (*IDTMC3D**).

DENOMINATOR

Surgical or medical discharges for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium). Surgical (*Appendix E: SURGI2R*) and medical (*Appendix C: MEDIC2R*) discharges are defined by specific MS-DRG codes.

[*Appendix C - Medical Discharge MS-DRGs*](#)

[*Appendix E - Surgical Discharge MS-DRGs*](#)

DENOMINATOR EXCLUSIONS

Exclude cases:

- with a principal ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for central venous catheter-related bloodstream infection (*IDTMC3D**)
- with length of stay less than 2 days
- with any listed ICD-10-CM diagnosis code for cancer (*Appendix H: CANCEID*)
- with any listed ICD-10-CM diagnosis code for immunocompromised state (*Appendix I: IMMUNID*)
- with any listed ICD-10-PCS procedure code for immunocompromised state (*Appendix I: IMMUNIP*)
- MDC 15 (newborns and other neonates with conditions originating in perinatal period)
- with an ungroupable DRG (DRG=999)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

[*Appendix H - Cancer Diagnosis Codes*](#)

[*Appendix I - Immunocompromised State Diagnosis and Procedure Codes*](#)

*See below for code list

Central venous catheter-related blood stream infection diagnosis codes: (IDTMC3D)

T80211A Bloodstream infection due to central
 venous catheter, initial encounter